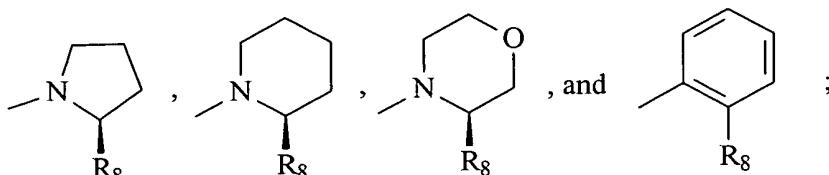


or a pair of R<sub>2</sub> and R<sub>3</sub>, R<sub>3</sub> and R<sub>4</sub>, R<sub>4</sub> and R<sub>5</sub>, and R<sub>5</sub> and R<sub>6</sub> together are -(CH)<sub>4</sub>- to form a naphthyl group;

R<sub>7</sub> is H, alkyl, phenyl, alkylphenyl, or alkylcarboxy; and

A is selected from the group consisting of:

B1  
Conclude



wherein R<sub>8</sub> is H, alkylhydroxy, or carboxy;

wherein at least one of R<sub>7</sub> and R<sub>8</sub> is carboxy or alkylcarboxy;

and wherein, when R<sub>1</sub> is -NH<sub>2</sub>, then one of R<sub>7</sub> or R<sub>8</sub> is not carboxy or alkylcarboxy;  
said insect selected from the group consisting of coleopterans, lepidopterans, and

dipterans.

## REMARKS

This is in response to the Official Action of September 25, 2001. The points raised therein are addressed below.

Claims 1-14 stand rejected under the second paragraph of 35 USC 112 as indefinite on pages 6-7 of the Official Action. Reconsideration in light of the amendments herein and the remarks below is respectfully requested.

First, it is noted that many of the dependent claims recite the phrase "said pest", and that this phrase now lacks antecedent basis. Claim 1 has been amended to recite "insect pest" to provide antecedent basis for the subsequent use of the term "pest", and it is respectfully submitted that this rejection may be withdrawn.

Second, claim 1 stands rejected as indefinite in the lack of recitation of an endpoint. Reconsideration is respectfully requested. As noted in applicants last response, the endpoint in the instant claims is provided by the recitation of "insecticidal effective". Applicant has amended this term to read "insecticidally effective" consistent with more common grammatical usage. It is

respectfully submitted that this phrase provides an endpoint for the recited method, and indeed it is respectfully submitted that the phrase "insecticidally effective" is long established as appropriate claim language in a large number of issued United States patents.

For example, claims 1 and 13 of U.S. Patent No. 6,492,357 read as follows:

1. An insecticidal composition comprising synergistically *insecticidal effective* amounts of ethiprole and indoxacarb, wherein the ratio by weight of ethiprole to indoxacarb is between 1:32 and 32:1.

13. A method of controlling infestation of insect pests in or on rice plants, comprising applying an insecticidal composition to the insect pests, to the rice plants, to medium in which the rice plants grow, and/or to a locus in which infestation is to be controlled, wherein the composition comprises synergistically *insecticidal effective* amounts of ethiprole and indoxacarb and wherein the ratio by weight of ethiprole to indoxacarb is between 1:32 and 32:1.

Claim 20 of U.S. Patent No. RE37,936 reads as follows:

21. A method according to claim 20, wherein said pests are insects and wherein said pesticidally effective amount is an *insecticidally effective* amount.

Claim 3 of U.S. Patent No. 6,486,191 reads as follows:

3. An insecticidal composition comprising an *insecticidally effective* amount of nitro-phenyl-sulphonyl-imidazole according to claim 1 in admixture with an inert diluent or carrier.

Claim 18 of U.S. Patent No. 6,468,523 reads as follows:

18. A method of killing a lepidopteran or coleopteran insect comprising contacting said insect with, or feeding to said insect, an *insecticidally-effective* amount of the polypeptide according to claim 1.

Claim 1 of U.S. Patent No. 6,455,079 reads as follows:

1. An insecticidal composition comprising:

(a) alcoholic extract obtained from one or more parts of the plant Albizzia lebbeck; together with

(b) Bacillus thuringiensis .delta.-endotoxin, useful in controlling insects of the class lepidoptera,

ingredients (a) and (b) together being present in amounts that, taken together, are *insecticidally effective*.

Further, a search of issued US Patents at [www.uspto.gov](http://www.uspto.gov) utilizing the advanced search feature, and the search phrase "acls/"insecticidally effective"" identifies **more than one hundred additional citations**. Will a few patents may issue with an improper phrase, it is respectfully submitted that the USPTO would not err over one hundred times by issuing patents with claims containing an indefinite phrase. Accordingly, it is respectfully submitted that the phrase "insecticidally effective" is an appropriate recitation of an end point for a method claim in a United States patent, and respectfully submitted that this rejection should now be withdrawn.

Claims 1-14 stand rejected under the first paragraph of 35 USC 112 as lacking enablement on pages 2-6 of the Official Action. Reconsideration is respectfully requested.

To narrow the issues, claim 1 has been amended to incorporate the group of insects previously identified in claim 3.

Clarification of the nature of the rejection as purely an enablement issue rather than a utility issue by the Examiner in the most recent official action is acknowledged with appreciation.

Reconsideration of the enablement rejection in light of the *Wands* factors as specified in MPEP2164.01(a). These are: (A) The breadth of the claims; (B) The nature of the invention; (C) The state of the prior art; (D) The level of one of ordinary skill; (E) the level of predictability in the art; (F) The amount of direction provided by the inventor; (G) The existence of working examples; and (H) the quantity of experimentation needed to make or use the invention based on the content of the disclosure. Each of these are addressed below:

**(A) The breadth of the claims.** The present claims are directed to a particular category of compounds which are defined by structure, the claimed compounds possess a common core structure, and the claims are directed to a particular category of insects. Thus the claims are not exceedingly broad in scope. Hence, it is submitted that this factor weighs in favor of the applicant in this case.

**(B) The nature of the invention.** The claims are method claims, which have by long established practice been accorded broader scope of enablement than claims to new compounds. The claims are directed to insecticidal uses, which as noted above are a well established category patentable of subject matter. Hence, it is submitted that this factor weighs in favor of the applicant in this case.

**(C) The state of the prior art.** The art of insecticidal compositions is well developed and provides a vast body of resources to which skilled persons can refer as an aid to practicing the present invention. Hence it is submitted that this factor weighs in favor of the applicant.

**(D) The level of one of ordinary skill.** The level of ordinary skill in this art is high, and would encompass at least a Ph.D. in entomology or related discipline, coupled with post-doctoral or industry experience. Since persons seeking to practice this invention possess great expertise, it is submitted that this factor weighs in favor of the applicant as well (while not at issue here, it is noted that the "person of ordinary skill" under section 112 not the same as the "person of ordinary skill" under 35 USC 103, as the former is a subjective test while the latter is an objective test; the former is measured at the time the application was filed while the latter is measured at the time the invention was made; the former applies the *Graham* factors while the latter applies the *Wands* factors; the former refers to the expert in each art to which the invention pertains while the latter refers to a single hypothetical person, ).

**(E) the level of predictability in the art.** As noted by the examiner, this art is unpredictable. However, as established by the MPEP, and *Wands* factors, this is not the sole or even the dispository inquiry in determining enablement.

**(F) The amount of direction provided by the inventor.** Considerable direction is given throughout the specification. Details are given on insects, specific compounds, manner of formulation, dosage, and modes of administration.

**(G) The existence of working examples.** It is acknowledged that no working examples of the use of the instant compounds are provided. However, it is also pointed out that, even in unpredictable arts, working examples are not required to satisfy the enablement requirement. *In re Strahilevitz*, 668 F.2d 1229, 212 USPQ 561 (CCPA 1982).

**(H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.** Numerous assays of insecticidal activity are well established for most insect pests. Such assays are relatively simple to implement as compared to more complicated assays involving *in vitro* cultures of mammalian tissues, sterile conditions, microbial or viral cultures, etc. Given the ready availability of compounds provided by the disclosure, it is respectfully submitted that experimentation required to determine how to practice the instant invention would be routine to persons skilled in this art.

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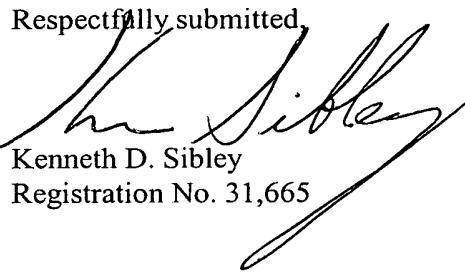
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For the foregoing reasons, it is respectfully submitted that the instant claims satisfy the requirements of 35 USC 112, second paragraph, and respectfully submitted that this rejection should be withdrawn.

The changes made by the amendments above are shown in the attached "**Version with Markings to Show Changes Made**".

It is respectfully submitted that this application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

  
Kenneth D. Sibley  
Registration No. 31,665



20792

PATENT TRADEMARK OFFICE

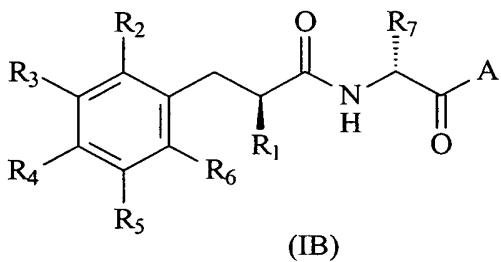
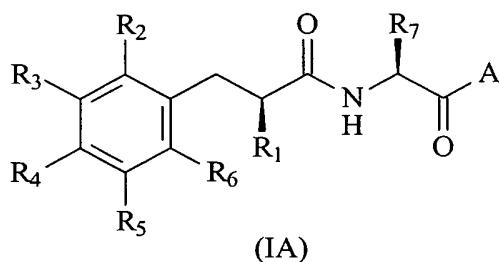
**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, Washington, DC 20231, on December 13, 2002.

  
Vickie D. Prior  
Date of Signature: December 13, 2002

**Version with Markings to Show Changes Made**

1 (amended). A method for inhibiting propagation of an insect comprising administering to said insect an insecticidally effective amount of an insecticidal compound of **Formula IA or Formula IB:**



wherein:

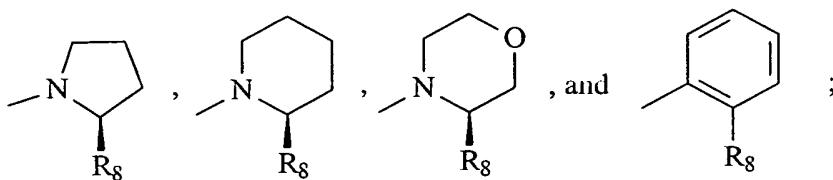
R<sub>1</sub> is -H, -NH<sub>2</sub>, or -OH;

R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are each independently selected from the group consisting of H, halogen, hydroxyl, alkyl, alkylhydroxy, alkoxy, or phenyl;

or a pair of R<sub>2</sub> and R<sub>3</sub>, R<sub>3</sub> and R<sub>4</sub>, R<sub>4</sub> and R<sub>5</sub>, and R<sub>5</sub> and R<sub>6</sub> together are -(CH)<sub>4</sub>- to form a naphthyl group;

R<sub>7</sub> is H, alkyl, phenyl, alkylphenyl, or alkylcarboxy; and

A is selected from the group consisting of:



wherein R<sub>8</sub> is H, alkylhydroxy, or carboxy;

wherein at least one of R<sub>7</sub> and R<sub>8</sub> is carboxy or alkylcarboxy;

and wherein, when R<sub>1</sub> is -NH<sub>2</sub>, then one of R<sub>7</sub> or R<sub>8</sub> is not carboxy or alkylcarboxy;

said insect selected from the group consisting of coleopterans, lepidopterans, and dipterans.